

PROJECT NUMBER: 1806
PROJECT TITLE: New Tobacco Processes
SECTION LEADER: S. R. Wagoner
PERIOD COVERED: July, 1988

I. PROJECT ART - PILOT PLANT SUPPORT

A. **Objective:** To provide processes for converting and casing stem materials for the Bermuda Hundred Pilot Plant.

B. **Results:** Batches of Louisville and D Pilot Plant CRS were cased with either citric acid or monopotassium citrate and shipped to the Bermuda Hundred Pilot Plant on a daily basis.

Installation of the Hauni WD tunnel into the D Pilot stem line was completed. Initial runs, checking the operation of the unit superheating IS appeared successful, and a significant filling power improvement was achieved across the unit. Further work may be required to increase the steam pressure to the tunnel to achieve optimum performance.

Testing of the Dickinson Admoist conditioning unit was completed in D Pilot Plant, and the unit was shipped to the Bermuda Hundred site. The tests successfully demonstrated the Admoist's capability to condition stems for subsequent rolling and cutting.

C. **Plans:** Continue to produce stem products as required by Project ART.

II. PROJECT ART - COMMERCIAL PROCESS DEVELOPMENT

A. **Objective:** To conduct trials providing information for development of the ART commercial process.

B. **Results:** In continuation of post-ART filler declumping studies, separation/steaming trials were conducted utilizing a VT separator and a modified PL separator. The results from these trials will be analyzed by Engineering so that the process design and equipment purchase for the commercial facility can proceed. The current plan is to install an air separator after the extraction process to separate any clumps that may form in the extractor vessel. The clumps will be loosened in a steam cylinder and returned to the main process flow.

A cigarette maker machinability trial was conducted at the Training Center on a Mark X maker with post-ART filler. The filler was initially processed through the Semiworks by being conditioned to 24% OV, cased, dried, and flavored with after-cut. The run appeared successful as cigarettes were made at 9000 cigarettes per minute. Samples were taken for CV/OV, sieve, and chemical analyses.

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